

On "Sargasso-Seas."

(Extract from a letter to Dr. GRAY from Prof. AGARDH.)

"On the maps of Capt. Maury there are marked several 'Sargasso-seas.' It is well known that the one in the Atlantic Ocean, between the Cape-Verde Islands and the Azores, consists merely of specimens of *Sargassum bacciferum*; but I think that it is not known of what species the other Sargasso-seas are formed, and that it would be of some interest to have specimens collected there. Would it not be in your power, by the commission of the Admiralty, to have specimens from the different localities collected? and they need be only rudely dried; they may be afterwards easily prepared. I find such Sargasso-seas marked in the following places:—

"West of the Cape of Good Hope, between 30° and 45° lat. S., between 0° and 15° long. W. from Greenwich.

"North from the Falklands, between 45° and 60° long.

"South-east from the Cape of Good Hope, between 45° and 90° long. E., and between 40° and 50° lat. S.

"East from New Zealand, between 45° and 50° lat. S., between 160° and 170° long.

"North from the Sandwich Islands, between 30° and 45° lat. N., 140° and 170° long.

"I think it would be of interest, not only for the algologist, but also for the knowledge of the movements of the sea, the study of currents, &c."

On sending Prof. Agardh's inquiries to Capt. Toynebee, he replies:—

"On referring to Capt. Maury's maps, I do not see so many Sargasso-seas as mentioned by Prof. Agardh.

"During my voyages to India we very frequently met with seaweed to the S.W. and also to the S.E. of the Cape of Good Hope: it was what is commonly called kelp, having long stalks and broad leaves. It is very abundant near Tristan d'Acunha, the Crozets, &c. I am not aware that there is any part of the sea which has large fields of weed of a kind peculiar to itself, excepting the Sargasso-sea in the Atlantic.

"I see, in his 'Physical Geography of the Sea,' Capt. Maury does give a map of these various patches of weed; but he does not imply that they are of kinds peculiar to those spots, but otherwise. I think I may say decidedly that those of the South Atlantic and Southern Indian Ocean are kelp or something of that kind."

The Chinese Long-tailed Goat Antelope (*Urotragus caudatus*).

By Dr. J. E. GRAY, F.R.S. &c.

The long-tailed goat antelope from North China (*Antelope crispa* of Radde, and *Antelope caudata* of Milne-Edwards) agrees with the genus *Capricornis* in having a naked muffle, but differs from it in having no crumen or suborbital pit in the skull in front of the orbit,

and from both in its long tail with a tuft of long hair at the end. I propose to make of it a genus under the name of *Urotragus*.

It has a moderate, moist muffle; the tail elongate, reaching to the hocks, hairy above, and with longer hair at the end. Skull flat in front of the orbits; intermaxillary bones very short, not reaching nearly to the nasals.

The genus is very different from *Capricornis* and *Nemorhedus*. The skull of *Capricornis* has a deep circular concavity in front of the orbit; the skull of *Nemorhedus* has only a slight broad depression; *Urotragus* has the same part rather convex, and has the nose of the skull much more produced, and the forehead more convex between the orbits. The tails of *Capricornis* and *Nemorhedus* are short, flat, and goat-like; that of *Urotragus* is elongate.

On the Phosphorescence of the Eggs of the common Glowworm.

By M. JOUSSET.

On the 16th of July last, in very warm weather, I collected in the park of the Château de Monjay two glowworms which shone brilliantly. These two females were coupled, and escorted by a supplementary male. I carried them to Paris in a glass tube; and the next day they laid about sixty eggs, of the size of a pin's head, which is very large in comparison with the size of the insect.

The shell of these eggs is so delicate that they cannot be touched without breaking it. The micropyle is very apparent; and their colour is yellowish.

It is worthy of note, and, as far as I know, has not yet been indicated, that these eggs are endowed with a bright phosphorescence. They are not only phosphorescent immediately after laying, but they remain phosphorescent. Those which I collected as above, presented the phenomenon without any diminution until the 23rd of July—that is to say, for seven days.

I could not continue the observation any further, because, having left the tube containing them open, I found them dried up.

If one of these eggs is crushed in the dark, the liquid which spreads upon the glass is phosphorescent, and continues luminous until it is quite dry.—*Comptes Rendus*, September 4, 1871, p. 629.

Water unfrozen at a Temperature of -18° Centigrade.

Boussingault finds that by preventing the dilatation of water, it may be kept unfrozen down to -18° C. He experimented with a gun-barrel of steel, into which a steel ball was dropped before filling it with water. During the cold days of December 26, 27, and 30, last, the temperature fell to -12° and -18° , and yet, on shaking the tube, the ball was found to move freely, showing that the water was not frozen.—*L'Institut*, July 12.